

IN THE CLAIMS:

The following is a complete listing of the claims and reflects all changes currently being made to the claims. This listing supersedes all earlier versions and all earlier listings of the claims:

1. (Cancelled).

2. (Cancelled).

3. (Cancelled).

4. (Cancelled).

5. (Currently Amended) A method for manufacturing an electron-source substrate comprising the steps of:

electrifying a plurality of electric conductors arranged on a substrate in a hermetic atmosphere so as to impart an electron-emission function to part of the electric conductors;

setting an average temperature difference during the electrifying between a region S_0 in which the plurality of electric conductors on the substrate are arranged and a region S_1 located on a periphery of the region S_0 at 15°C or more,

wherein the substrate satisfies the relational expression:

$$\underline{L_1/L_0 > E\alpha\Delta T/\sigma_{th} - 1},$$

where L_0 [m] represents the width of the region S_0

L_1 [m] represents the width of the region S_1

ΔT [K] represents the average temperature difference

E [Pa] represents Young's modulus of the substrate

α [/K] represents the coefficient of linear thermal expansion of the

substrate, and

σ_{th} [Pa] represents the material constant of the substrate;

cutting the substrate into desired sizes after the electrifying; and

~~A manufacturing method according to Claim 3, further comprising the steps~~
~~of chamfering, polishing, and cleaning the periphery of the substrate after the~~
~~cutting.~~

6. (Cancelled).

7. (Cancelled).